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动物分类学报

中国婴螺属一新种记述（腹足纲，肺螺亚纲，柄眼目，艾纳螺科）

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摘 要 记述采自甘肃省陆生贝类1新种，天水婴螺 *Pupinidius tianshuiensis* sp. nov.，文中对新种形态特征、栖息环境进行了描述，并与其相似种进行了比较和讨论。

关键词 肺螺亚纲，柄眼目，艾纳螺科，婴螺属，新种.
中图分类号 Q959.212

婴螺属 *Pupinidius* 由 Moellendorff 于 1901 年确立，其特征为：贝壳呈卵圆形至圆锥形，其中部为圆柱状。口缘扩大，口缘中断部分短，在外缘的基部具有1个较厚的胼胝。现已记载有11种，此属的种类主要分布于中国西北部及四川西北部等地区（Moellendorff，1899，1901；Preston，1912；Yen，1939）。笔者在整理甘肃省天水地区陆生贝类标本时，经鉴定发现艾纳螺科 Enidae，婴螺属 *Pupinidius* 1新种，即天水婴螺 *Pupinidius tianshuiensis* sp. nov.，报道如下。正、副模标本均保存在福建出入境检验检疫局技术中心标本馆（福州）。

天水婴螺，新种 *Pupinidius tianshuiensis* sp. nov.（图1～5）

正模标本 壳高 14.0 mm，壳宽 6.0 mm，壳口高 3.9 mm，壳口宽 3.5 mm，2010 年 7 月 14 日采自甘肃省天水市平南镇（标本编号：181121）。副模标本 80 个。壳高 12.0 ~ 15.0 mm，壳宽 5.0 ~ 7.5 mm，壳口高 3.3 ~ 4.1 mm，壳口宽 2.9 ~ 4.0 mm，2010 年 7 月 14 日采自甘肃省天水市平南镇（标本编号：181122 – 181202）。

词源：新种种名源于标本采集地。

形态特征 贝壳中等大小，壳质稍厚，坚实，呈业圆柱形。有 $6\frac{1}{2}$ 个螺层，前几个螺层增长迅速，略膨胀，螺旋部长，呈圆柱形。体螺层增长缓慢，略膨大，螺旋部呈圆锥形，倒数第2螺层较体螺层膨大。壳面呈浅黄褐色或黄褐色，有光泽，其上并有清晰而稠密的生长线和螺纹，在螺旋部上有深褐色和浅白色条纹相间的条纹。壳顶尖，胚螺层光滑，无螺纹，缝合线深。壳口呈椭圆形，口缘向外扩大，其边缘锋利，呈白瓷色，在外唇基部有1稍厚的胼胝部。脐孔呈缝隙状。

生殖系统解剖特征 阴茎呈圆柱状，阳茎基背板长，圆柱状，缺鞭状体和盲突。阴茎附属器官各部分（A-1、A-2、A-3、A-4、A-5）均有发育。性收缩肌分两支，阴茎收缩肌附着于阴茎与阳茎基背板相接处，阴茎收缩肌与附属器官收缩肌合并后固定在横隔上。阴道和游离输卵管均较短，游离输卵管略长于阴道。受精囊管长，弯曲；受精囊柄短；受精囊管突起壁较薄，显著长于受精囊柄，末端膨大呈囊状，其上有凹褶。阴茎、受精囊管突起浅灰色，阴茎附属器官深灰色，其余结构乳白色，均无色斑。

栖息环境 常生活在灌木丛、草丛中，石块、落叶下和土石缝隙中，或栖息于潮湿多腐殖质的公路旁及岩石壁上。螺体表面常有泥土裹覆而形似泥丸。

讨论 新种与婴婴螺 *Pupinidius pupinidius*（Moellendorff，1901）外形上极为相似，但后者个体较大（壳高 23.0 mm，壳宽 13.0 mm，壳口高 12.0 mm，壳口宽 10.0 mm），有 $7\frac{1}{2}$ 个螺层，并且在壳面上有栗褐色和黄白色相间的条纹图案。因而与前者有所区别。此外，新种与格氏婴螺 *Pupinidius. gregorii*（Moellendorff，1901）也进行了比较，后者个体较大，壳高 21.5 mm，壳宽 11 mm，壳口高 10 mm，壳口宽 8 mm。有 8 个螺层，壳面呈灰土黄色，并有稀少的角褐色条纹，在靠近缝合线底部有栗色色带，在外唇基部无一稍厚的胼胝部。而新种壳面呈浅黄褐色或黄褐色，其上有深褐色和浅白色条

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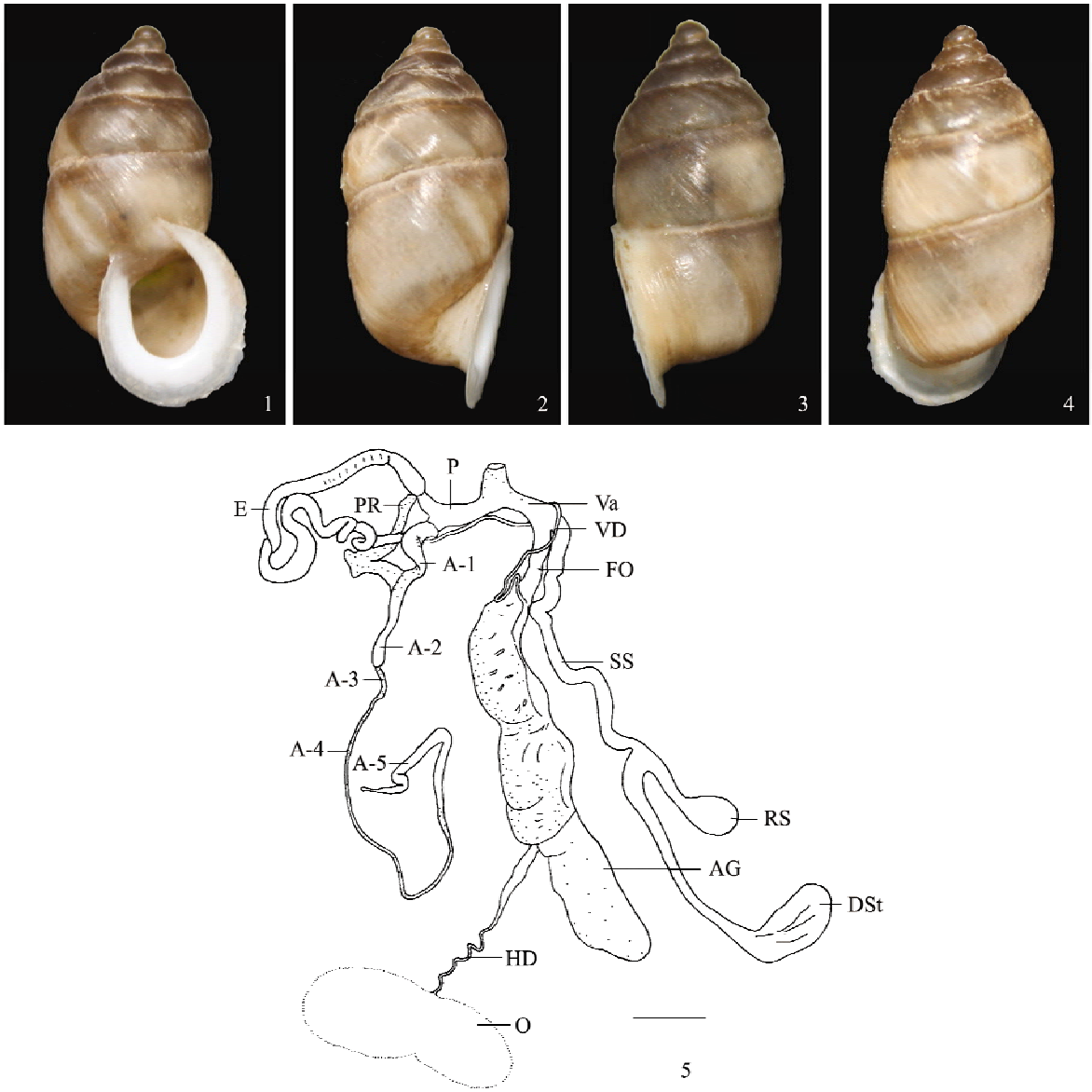

图 1～5 天水婴螺，新种 *Pupinidius tianshuiensis* sp. nov.

1. 贝壳侧面观（lateral view of shell）2. 贝壳左侧面观（left lateral view of shell）3. 贝壳右侧面观（right lateral view of shell）4. 贝壳背侧面观（dorsal lateral view of shell）5. 生殖系统解剖图 A. 阴茎附属器官（penial appendix）Va. 阴道（vagina）VD. 输精管（vas deferens）FO. 游离输卵管（free oviduct）SS. 受精囊管（spermathecal stalk）DSt. 受精囊管突起（diverticle spermathecal stalk）RS. 受精囊（reservoir）AG. 蛋白腺（albumen gland）HD. 两性腺管（hermaphroditic duct）O. 两性腺（ovotestis）PR. 阴茎收缩肌（penial retractor）E. 阳茎基背板（epiphallus）P. 阴茎（penis）比例尺（scale bar）= 2 mm

纹相间的条纹，在靠近缝合线底部无栗色色带，在外唇基部有 1 稍厚的胼胝部。显然与新种相差很大。

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A NEW SPECIES OF THE GENUS *PUPINIDIUS* (MOELLENDORFF, 1901) FROM CHINA (PULMONATA, STYLOMMATOPHORA, ENIDAE)

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Abstract In the present paper a new species of land snail is described. The materials were collected by the authors in Tianshui City, Gansu Province, China, July 2010. Type specimens are deposited in the Fujian Entry-Exit Inspection & Quaratine Bureau, Fuzhou, China.

Pupinidius Moellendorff, 1901 is a small group in Enidae and known to be distributed in the Northwest of Sichuan Province and Northwest of China. In the present paper a new species of land snail is described. The materials were collected by the authors in Tianshui City, Gansu Province, China, July 2010. Type specimens are deposited in the Fujian Entry-Exit Inspection & Quaratine Bureau, Fuzhou , China.

***Pupinidius tianshuiensis* sp. nov.** (Figs 1 – 5)

Holotype. Height 14.0 mm, diameter 6.0 mm, aperture height 3.9 mm, aperture width 3.5 mm, collected from Pingnan Town, Tianshui City (34°06′N, 105°07′E), Gansu Province, China, 14 July 2010.

Paratypes. 80 specimens, height 12.0 – 15.0 mm, diameter 5.0 – 7.5 mm, aperture height 3.3 – 4.1 mm, aperture width 2.9 – 4.0 mm, collected from Pingnan Town, Tianshui City (34°06′N, 105°07′E), Gansu Province, China, 14 July 2010.

Shell medium, thick, lustrous, subcylindrical. Whorls 6 $\frac{1}{2}$, moderately convex, spire depressed-conical; embryonic whorl 1 – 2, increased slowly, smooth; body whorl cylindric; penultimate expanding. Shell yellowish or yellow-brown in colour, regularly and weakly striatulate, silky, with chestnut and pallid-yellow stripes on spire. Apex acute. Suture deep. Aperture rounded-oval, apertural margin broadened, sharp, shortly interrupted, outer margin with a callous thickening at the base. Umbilicus small, crevice-formed.

Penis cylindrical, epiphallus long, cylindrical, without whip-shaped and blind papilla, penial appendix developed, penial retractor with two, and adhere to epiphallus, penial retractor and appendix retractor retractor fixed on diaphraqgm. Vagina and free oviduct short, spermathecal stalk long, curveed, spermathecal handle short; wall of spermathecal stalk thin, short; end with pocket- shaped and folds. Penis and diverticle spermathecal stalk light greyish white, penial appendix dark grey, other milky white, and without colour-spot.

The new species resembles *Pupinidius pupinidius* (Moellendorff, 1901), but the latter has a larger shell (height 23.0 mm, diameter 13.0 mm; aperture height 12.0 mm, aperture width 10.0 mm), more whorls (7 $\frac{1}{2}$ whorls) and chestnut and pallid-yellow stripes on shell. In addition, the new species compared with *Pupinidius. gregorii* (Moellendorff, 1901), the latter has a larger shell (height 21.50 mm, diameter 11.0 mm; aperture height 10.0 mm, aperture width 8.0 mm), more whorls (8 whorls), and ashen-yellow on shell, and with few corner-brown, with tape of chestnut colour on suture base, outer margin without a callous thickening at the base. But the new species with yellowish or yellow-brown in colour, regularly and weakly striatulate, silky, with chestnut and pallid-yellow stripes on spire, outer margin with a callous thickening at the base.

Etymology. The name of the new species is based on the type locality Pingnan Town, Tianshui City.

Key words Pulmonata, Stylommatophora, Enidae, *Pupinidius*, new species.

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